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AF/1761



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re Patent Application of

Susan Farnsworth et al.

Application No.: 10/099,756

Filed: March 18, 2002

For: COLORED AND/OR FLAVORED
FROZEN FRENCH FRIED POTATO
PRODUCT

Group Art Unit: 1761

Examiner: ARTHUR L CORBIN

Confirmation No.: 4103

DECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Susan Farnsworth, do hereby declare the following in connection with the above-identified application.

I am one of the named inventors in this application and am familiar with the subject matter described and claimed in the application.

I am currently employed by Heinz North America, a division of H.J. Heinz Company, and have worked for Heinz North America since 1992. In my current position as Associate Food Technologist, I have been involved with new product development and support for existing products in the area of formed and extruded potato products.

I am familiar with the subject matter recited in Claim 9 of this application which is directed to a method of preparing potato products. The claimed method comprises at least partially cooking potatoes in a water bath or steam chamber, producing potato mash from the at least partially cooked potatoes, mixing the potato mash with a food grade color to produce a colored potato mixture, forming the colored potato mixture into potato pieces, frying the potato pieces, and freezing the potato pieces.

I am aware that Claim 9 of this application is currently rejected as being unpatentable over the disclosure in U.S. Patent No. 5,484,617 to Tiffany. The Tiffany patent describes a process for producing potato products having a golden yellow color. The disclosed process involves initially preparing raw potato pieces in a conventional manner by peeling and cutting potatoes into potato pieces of desired shapes suitable for partial cooking in a water bath or steam chamber. The potato pieces are immersed in an aqueous solution of food grade color that includes annatto, blends of annatto, FD Yellow No. 5, FD Yellow No. 6, beta carotene and/or tumeric. The patent also describes including a reducing sugar such as dextrose in the aqueous color solution. The patent states that the potato pieces removed from the aqueous color solution have a light golden color and are suitable for further cooking which turns the potato products to a deeper golden yellow color. The Tiffany patent also mentions near the bottom of column 4 that the disclosed coloring technique can be used in preparing French fried potato pieces and many other forms of potato potatoes, whether prepared from raw potatoes or reconstituted from mashed potatoes extruded into other desired configurations or forms. This discussion near the bottom of column 4 of the Tiffany patent thus notes that the potato pieces which are dipped into the aqueous color solution can be potato pieces prepared from raw potatoes or potato pieces formed as extruded potato pieces.

I understand the Examiner believes that immersing the extruded potato pieces (mentioned at the bottom of column 4 of the Tiffany patent) into the aqueous color solution described in the Tiffany patent (a solution containing annatto and dextrose) would result in potato pieces colored throughout in much the same way as potato pieces produced by mixing food grade color into a potato mixture and forming the colored potato mixture into potato pieces. Based on this belief, I understand the Examiner has taken the position that it would have been obvious to implement the method described in the Tiffany patent by adding

the disclosed annatto to the potato mixture from which the extruded potato pieces are produced as opposed to dipping the extruded potato pieces into the aqueous color solution.

Based on my knowledge of, and work with, formed potato products, I do not believe that immersing formed potato pieces into the aqueous color solution described in the Tiffany patent would result in potato pieces colored throughout. I thus performed tests as described below to ascertain whether formed potato pieces dipped into the aqueous color solution described in the Tiffany patent would result in potato pieces colored throughout in the same way as potato pieces formed from a colored potato mixture as recited in Claim 9.

I began by making three batches of potato mixture, each produced in the same way. The three batches of potato mixture were prepared by peeling and cutting potatoes, steaming the potatoes and then ricing the potatoes to produce a potato mash. To this potato mash, I added potato flakes, salt, distilled monoglycerides, xanthan gum, HVP replacer, and dehydrated granulated onion to obtain the three batches of potato mixture. Up to this point, the process employed to produce the three batches of potato mixture is the same process we use to make the Crispers® product, a Heinz Ore-Ida formed potato product available in supermarkets.

Two batches of the potato mixture were then colored as generally recited in Claim 9 of this application. To do this, I added Yellow No. 5 food dye (0.01 wt. %) to one of the batches of potato mixture to produce a first colored potato mixture. This first colored potato mixture is shown in the attached photograph 1. To a second one of the batches of potato mixtures I added Yellow No. 6 food dye (0.01 wt. %) to produce a second colored potato mixture. This second colored potato mixture is shown in the attached photograph 5.

I then extruded the first colored potato mixture into first colored potato pieces as illustrated in attached photograph 2, and also extruded the second colored potato mixture into second colored potato pieces as illustrated in attached photograph 6. The attached

photograph 3 shows two of the first colored potato pieces before frying, one in its whole state and the other cut open to illustrate the coloring that is imparted throughout the potato piece. Similarly, the attached photograph 7 shows two of the second colored potato pieces before frying, one in its whole state and the other cut open to illustrate the coloring that is imparted throughout the potato piece. I then fried the first and second colored potato pieces for 45 seconds at 385°F which is the typical time and temperature parameters we use for cooking potato pieces of this type. Photograph 4 shows two of the first colored potato pieces after frying, one in its whole state and the other cut open to illustrate the coloring throughout the potato piece. Similarly, photograph 8 shows two of the second colored potato pieces after frying, one in its whole state and the other cut open to illustrate the coloring throughout the potato piece.

With respect to the third batch of potato mixture described above, no color was added to this batch. This non-colored potato mixture is shown in the attached photograph 9. I extruded this non-colored potato mixture illustrated in Fig. 9 to produce the extruded third potato pieces shown in photograph 10. Photograph 11 illustrates two of the extruded third potato pieces shown in photograph 10, one in its whole state and the other cut open.

I then prepared an aqueous solution or color dip as described in the Tiffany patent. The color dip included 0.12 wt. % annatto (about 2.70 wt. % norbixin) and 1.50 wt. % dextrose at a temperature of 180°F. The amount of annatto was selected as the upper end value of the preferred range mentioned in lines 25-26 of column 3 of the Tiffany patent, the amount of dextrose was selected as the upper end value of the preferred range mentioned in lines 50-53 of column 3 of the Tiffany patent, and the temperature was selected as the upper end value of the preferred temperature range discussed in lines 23-24 of column 3 of the Tiffany patent. The attached photographs 12 and 13 illustrate one of the extruded third potato pieces just prior to submersion in the color dip.

I then submersed the extruded third potato piece into the color dip (temperature of 180°F) for a period of time of 30 seconds. This period of time was selected as the upper end value of the preferred range discussed in lines 35-36 of column 3 of the Tiffany patent. The attached photograph 15 illustrates the extruded third potato piece after the color dip. The attached photograph 16 also illustrates two of the extruded third potato pieces after the color dip, with one of the extruded third potato pieces in the whole state and the other cut open to show the lack of coloring throughout the extruded third potato pieces.

The attached photograph 17 illustrates the extruded third potato pieces after color dipping and just prior to dipping into the frying oil, while the attached photograph 18 shows the extruded third potato pieces after color dipping as they are placed into the frying oil. The extruded third potato pieces were fried for 45 seconds at 385°F. The attached photograph 19 shows two of the extruded third potato pieces after frying, one in the whole state and the other cut open to once again show the lack of coloring throughout the fried potato piece.

Thus, I believe the results of the tests I performed establish that potato pieces produced by dipping extruded potato pieces in the aqueous color solution described in the Tiffany patent do not have coloring throughout. In contrast, potato pieces produced in accordance with the method recited in Claim 9 of this application, in which food grade color is added to the potato mixture prior to forming the potato pieces, are colored throughout. This can be seen by comparing photographs 3 and 7 with photograph 16, and also through a comparison of photographs 4 and 8 with photograph 19.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the

United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: August 20, 2004

Susan Farnsworth
Susan Farnsworth



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Susan Farnsworth et al.)	Group Art Unit: 1761
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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Sir:

I, Craig Doan, do hereby declare the following in connection with the above-identified application.

I am currently employed by Heinz North America, a division of H.J. Heinz Company, and have worked for Heinz North America since September, 1998. In my current position as Senior Food Technologist, I have been involved with product development for Heinz North America Consumer Products, specifically in the area of formed and formulated potato products that include spices, seasonings and other functional ingredients.

I earned a Bachelor of Science degree in Animal Science from the University of Idaho and a Master of Science degree in Food Science also from the University of Idaho.

I am familiar with the subject matter of the above-identified application, including the claims. I am aware that Claim 21 of this application is directed to a prepared sweet flavored French fried potato product comprising potato pieces produced through the addition of an artificial sweetener to impart a sweet taste to the potato product and subsequently fried.

I understand this claim has been rejected as being unpatentable over the disclosure in U.S. Patent No. 5,484,617 to Tiffany. The Tiffany patent describes a process for

producing potato products having a golden yellow color. The disclosed process involves initially preparing raw potato pieces in a conventional manner by peeling and cutting potatoes into potato pieces of desired shapes suitable for partial cooking in a water bath or steam chamber. The potato pieces are immersed in an aqueous solution of food grade color that includes annato, blends of annato, FD Yellow No. 5, FD Yellow No. 6, beta carotene and/or tumeric. The potato pieces removed from the aqueous solution of food grade color have a light golden color and are suitable for further cooking which turns the potato products to a deeper golden yellow color. The patent also mentions that a reducing sugar such as dextrose, arabinose, fructose, galactose, mannose, maltose, lactose or cellobiose can be added to the aqueous color solution. The Tiffany patent states that these reducing sugars are provided for purpose of providing highlights and extra flavor associated with caramelization during the cooking steps following immersion in the aqueous color solution. In other words, the Tiffany patent describes adding a reducing sugar to the aqueous color solution so that when the potato pieces are subsequently cooked, the reducing sugar will caramelize and provide flavoring and highlights.

I understand the rejection of Claim 21 is based on the Examiner's belief that it would have been obvious to replace dextrose as described in the Tiffany patent with an artificial sweetener and still achieve the same caramelization upon subsequent cooking as described in the Tiffany patent. However, based on my knowledge and experience, it is my understanding that an artificial sweetener is not capable of caramelization during cooking as envisioned by the Tiffany patent. To determine whether my understanding is accurate, I contacted a representative from the company that produces Splenda®, one of the artificial sweeteners mentioned in the present application (see the top of page 13 of the application). The response I received by electronic correspondence, a copy of which is attached, confirms that the artificial sweetner Splenda® is not capable of caramelization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 8-19-04

A handwritten signature in black ink, appearing to read 'C. H. Doan', written over a horizontal line.

Craig Doan

From: splenda@mccus.nj.com [mailto:splenda@mccus.nj.com]
Sent: Monday, April 05, 2004 9:57 AM
To: craig.doan@hjheinz.com
Subject: Re: Splenda No Calorie Sweetener / reference 3384028A

Dear Craig,

Thank you for visiting the SLENDA (R) No Calorie Sweetener website. We hope you became more familiar with SLENDA (R) No Calorie Sweetener during your visit to the site.

SLENDA (R) No Calorie Sweetener does not brown or caramelize, so it cannot be used like sugar to achieve caramel color or flavor and does not melt for candying.

Unfortunately, we do not suggest making candy, fudge, fudge brownies or any high sugar content foods. Sugar is responsible for the structure of these products and if you remove the sugar there is no structure.

In many recipes SLENDA (R) No Calorie Sweetener can replace sugar completely. However, some recipes, especially baked goods and desserts, may require structure and bulk that cannot be provided by SLENDA (R) Brand Sweetener alone. For this reason, some of our recipes are adjusted to compensate for the loss of structure. They may also contain sugar-containing ingredients (eg. molasses, honey, chocolate syrup, etc.) that also contribute important flavor elements and improve texture.

Recipes baked with SLENDA (R) No Calorie Sweetener will bake faster than those made with sugar. This is because sugar adds moisture to a recipe and increases the baking time. When you take out the sugar and moisture, recipes bake in less time. In addition, sugar makes a product brown and without it the baked food will not brown and you may not realize that the baked good is done, over baking it.

SLENDA (R) No Calorie Sweetener recipes along with cooking and baking tips can be found on our website at www.splenda.com.

Here is some additional information you may find helpful.

Dessert How-Tos

Cakes

Successfully make a cake sweetened with SLENDA(r) Granular by following these tips:

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For every 1 cup of SPLENDA(r) Granular, add 1/2 cup nonfat dry milk powder (sifted) and 1/2 teaspoon of baking soda.

Add sifted nonfat dry milk and baking soda to the remaining dry ingredients.

Otherwise follow the recipe's directions.

Baking: Check for doneness 7 to 10 minutes earlier than the recipe calls for.

Bar Cookies, Brownies, Muffins and Quick Breads

Successfully make bar cookies, brownies, muffins, and quick breads sweetened with SPLENDA(r) Granular:

For every 1 cup of SPLENDA(r) Granular, add 1/2 teaspoon of baking soda.

Add SPLENDA(r) Granular to the butter, and cream the mixture well.

Add baking soda to the recipe's directions.

In muffins and quick breads, the addition of 1 to 2 tablespoons of honey or molasses will add some flavor and moistness.

Baking: Check for doneness 3 to 5 minutes earlier than the recipe calls for.

Fruit Fillings, Sauces, Puddings, and Custards

These recipes may not be as thick as when they are made with sugar because sugar lends a viscous quality.

These recipes may cook a bit faster.

Adding additional flavor, such as 1/2 teaspoon of vanilla extract per cup of SPLENDA(r) Granular, can boost the flavor.

Sweeteners 101

When you replace SPLENDA(r) Granular for sweeteners that have calories, it is important to understand the many roles of sweeteners in cooking and baking. With this understanding and the tips below in hand, you will be able to make great dishes.

Sugar and other caloric sweeteners, such as honey, brown sugar, and maple syrup, add other characteristics in addition to adding a sweetness:

They give structure, texture, and volume to recipes.

Sweeteners can caramelize and add browning.

They help retain moistness and provide tenderness to baked goods.

They provide a preservative quality, keeping foods fresh for a longer time.

SPLENDA(r) Granular works best in recipes where the main role is to provide a sweet taste. For example, SPLENDA(r) Granular works well in pie fillings, cheesecakes, sweet sauces, marinades and glazes. It also works well in quick breads, muffins, cookies, and pies.

In recipes where sugar provides bulk structure to the product, such as yellow or chocolate cakes, you may need to make a few slight changes in your recipe for best results. In recipes where the amount of sugar is quite high, such as

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meringues, caramel, pecan pies, and angel food or pound cakes, complete substitution of SLENDA(r) Granular for all the sweeteners may not yield the best results.

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We value hearing from our consumers. Please feel free to call us with any additional comments or questions on our toll-free number 1-800-7-SLENDA (1-800-777-5363), Monday through Friday from 9:00 AM to 5:00 PM, Eastern Time. You may also access our website at www.splenda.com for recipes, cooking and baking tips, and answers to frequently asked questions.

Tracey Ely

SLENDA Consumer Relationship Center

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